

a flexible transducer assembly bonded to the curvilinear surface of said base, including,

a flexible backing plate having an acoustic impedance the same as that of said base, said flexible backing plate having opposed sides, one of which is bonded to the curvilinear surface of said base with an epoxy resin containing heavy metal powder to match the acoustic impedance of said base to said backing plate, and

an array of ultrasonic transducer elements disposed on the other side of said flexible backing plate, said array of transducer elements comprising a piezoelectric ceramic plate having opposed sides, electrode layers provided on the opposed sides of said piezoelectrical ceramic plate, and a matching layer formed on a selected of said electrode layers, said array having grooves cut through said piezoelectric ceramic plate, said electrode layers, [and] said matching layer and a portion of [at least through] the flexible backing plate to define individual transducer elements and to isolate said individual transducer elements.--

Please cancel without prejudice Claim 6.